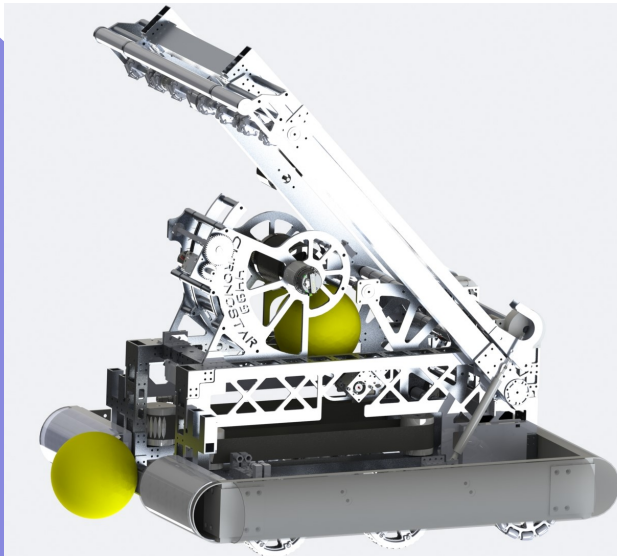


Our Robot: Chronostar



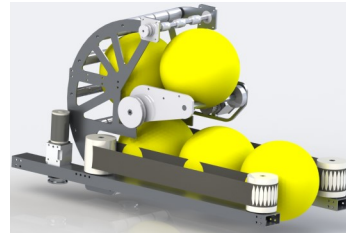
Our robot was designed to be a low trench cycle robot that will shoot in the high goal. Our robot is also capable of climbing on the generator switch. Or robots drive train has 4 falcons, our shooter has 2 falcons and an adjustable hood to allow multiple shooting locations.

Vision

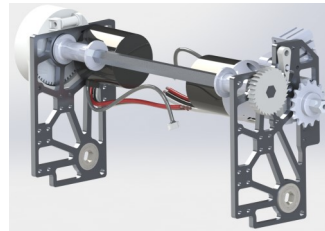
We also integrated vision recognition to the reflective tape by using a Jevois camera. We send distance and angle to the target to the Roborio and display the data to the drivers.



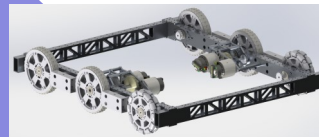
Our Mechanisms



Feeder Mechanism



Climber Winch



Intake/
climber

Chassis

Thank You to our sponsors and Mentors!



We Couldn't Do This Without You!



FIRST team #4499

FIRST
ROBOTICS
COMPETITION

The Highlanders



We are The Highlanders, Team 4499, a community-based team that began in 2013 through a 501(c)3 nonprofit, Neaera robotics in Fort Collins, CO. We are a team of 11 students from grades 8-12, from 6 different schools. We build a robot to meet a different challenge each year and compete in a robotics challenge put on by FIRST, an organization working to promote STEM education through cooperation — a combination of cooperation and competition — in students from ages 5 to 18. Our team's mission is to give children, from elementary through high school, the opportunity to experience STEM in real life, and to have fun building robots while we do it!

Our 2020 Schedule:

Feb 28-Mar 1: Greater Kansas City Regional
March 19-21 Colorado Regional, Denver CO

Outreach: FIRST



In the past few years we have also:

- Helped run an FLL tournament for the 6th year in a row.
- Volunteered and demoed at 2 FLL Jr. expos.
- Held 4 FLL, 2 FLL Jr. and 1 Water Robotics Summer Camps
- Started and mentored an FLL Jr. Team, and mentored many other FLL teams.



Contact us at: www.highlandersrc.com

Outreach: Community



One of our favorite things has been marching in the 4th of July parade in Fort Collins. It's great to hear the kids (and adults!) cheer when the 2014 bot—still a crowd favorite—kicks that big ball down the parade route.



Over the past 5 years we have demonstrated our robots at more than 62 local events. Venues included our city science museum (3 times!), a mall, after-school camps, robotics showcases, FLL state and regional tournaments, and many local businesses.



email: teaminfo@highlandersfrc.com

Robot Disguise Day

We have worked hard to think of different ways to “spread the word” of FIRST and STEM. One of our favorites has been dressing our robots up and taking them out on the town.



Above is our 2017 robot dressed up as a dragon! We added the smoke for special effects!

Here is our Spider bot! We created this robot out of a practice bot, pool noodles and a bucket!



visit us at : www.highlandersfrc.com